

## LIST OF PUBLICATIONS

1. On homothetic triangles (rom.), *Gaz. Mat. Fiz.* **B 10** (1959) 20-21.
2. Properties of arbitrary triangles and their circumscribed circles (rom.), *Gaz. Mat. Fiz.* **B 10** (1959) 346-350.
3. Applications of the three-perpendiculars-theorem (rom.), *Gaz. Mat. Fiz.* **B 12** (1961) 146-150.
4. Isogonal lines and rotated angles in a triangle (rom., hung.), *Gaz. Mat. Fiz.* **B 14** (1963) 207-214.
5. Geometric constructions with ruler, compass, and trisector (rom.), *Stud. Cerc. Mat.* **15** (1964) 405-411.
6. Note sur les hyperplans isogonaux d'un simplexe, *Bull. Math. Soc. Sci. Math. Phys. R.P.R.* **8** (1964) 317-320.
7. About the trisectors of a triangle (rom., hung.), *Gaz. Mat. B* **14** (1964) 483-485.
8. Sur quelques théorèmes de G. Szekeres et S. Marcus concernant les fonctions monotones et convexes, *Rev. Roum. Math. Pures Appl.* **10** (1965) 81-90.
9. Simplicial convexity in vector spaces, *Bull. Math. Soc. Sci. Math. Phys. R.P.R.* **9** (1965) 137-149.
10. On teaching the similarity of triangles (rom.) (with D. Papadopol), *Gaz. Mat. A* **70** (1965) 146-149.
11. On the fundamental lemmas of the Calculus of Variations, *Rev. Roum. Math. Pures Appl.* **10** (1965) 505-510.
12. Constructibility with ruler, compass, and trisector (rom.), *Gaz. Mat. A* **70** (1965) 204-213.
13. Un problème variationnel dans l'espace de Riemann (with T. Albu), *Rev. Roum. Math. Pures Appl.* **10** (1965) 1323-1330.
14. On the geodesics of a particular nondifferentiable manifold (rom.), *Gaz. Mat. A* **70** (1965) 96-99.
15. On teaching the ellipse (rom.), *Gaz. Mat. A* **70** (1965) 356-358.
16. Sur les fonctions du type  $K$ , *Rev. Roum. Math. Pures Appl.* **10** (1965) 1575-1582.
17. Caractérisations des hypersurfaces convexes, *Bull. Math. Soc. Sci. Math. R.S.R.* **9** (1965) 247-252.

18. Réductibilité et séries linéaires de corps convexes, L'Enseign. Math. **12** (1966) 57-67.
19. Constructions with ruler, compass, and trisector (rom.), Gaz. Mat. A **71** (1966) 9-18.
20. Familles de corps associés à un corps convexe, Bull. Math. Soc. Sci. Math. R.S.R. **10** (1966) 397-412.
21. On pencils of diameters in convex bodies (with A. S. Besicovitch), Rev. Roum. Math. Pures Appl. **11** (1966) 637-639.
22. Sur les corps associés à un corps convexe, Rev. Roum. Math. Pures Appl. **12** (1966) 727-735.
23. Sur les séries linéaires de corps convexes à frontières non différentiables et applications à la réductibilité, Rev. Roum. Math. Pures Appl. **11** (1966) 1015-1022.
24. Establishing Frenet's formulae (rom.) (with Ch. Zamfirescu), Gaz. Mat. A **71** (1966) 371-374.
25. Two characterizations of simplices (rom.), Gaz. Mat. A **71** (1966) 422-424.
26. Another kind of problems (rom.), Gaz. Mat. A **71** (1966) 462-468.
27. Sur la réductibilité des corps convexes, Math. Z. **95** (1967) 20-33.
28. Sur une fibration de l'espace des corps convexes (with P. Vincensini), C. R. Acad. Sci. Paris A-B **264** (1967) 510-511.
29. On  $l$ -simplicial convexity in vector spaces, Pacific J. Math. **22** (1967) 565-573.
30. Sur les familles continues de courbes I, Atti Accad. Naz. Lincei Rend. **42** (1967) 771-774.
31. Sur quelques questions de continuité liées à la réductibilité des corps convexes, Rev. Roum. Math. Pures Appl. **12** (1967) 989-998.
32. Sur les familles continues de courbes II, Atti Accad. Naz. Lincei Rend. **43** (1967) 13-17.
33. Reducibility of convex bodies, Proc. London Math. Soc. **17** (1967) 653-668.
34. Conditions nécessaires et suffisantes pour la réductibilité des voisinages des corps convexes, Rev. Roum. Math. Pures Appl. **12** (1967) 1523-1527.
35. Théorème dual concernant les familles continues des courbes, Bull. Cl. Sci. Acad. Roy. Belg. **53** (1967) 1385-1391.
36. Sur les familles continues de courbes III, Atti Accad. Naz. Lincei Rend. **44** (1968) 639-642.

37. Sur les familles continues de courbes IV, Atti Accad. Naz. Lincei Rend. **44** (1968) 753-758.
38. Sur les points multiples d'une famille continue de courbes, Rend. Circ. Mat. Palermo **18** (1969) 103-112.
39. On a theorem of Chartrand, Kapoor and Kronk, Rend. Circ. Mat. Palermo **18** (1969) 319-322.
40. Les courbes fermées doubles sans points triples associées à une famille continue, Israel J. Math. **7** (1969) 69-89.
41. On planar continuous families of curves, Canad. J. Math. **21** (1969) 513-530.
42. The simplicial convexity of convex surfaces, Rev. Roum. Math. Pures Appl. **14** (1969) 889-897.
43. Sur quelques généralisations par F. Browder du principe de contraction de Picard-Banach, Atti Accad. Naz. Lincei Rend. **49** (1970) 11-16.
44. On the line-connectivity of line-graphs, Math. Ann. **187** (1970) 305-309.
45. Convexité par rapport à une famille continue de courbes I, Atti Accad. Naz. Lincei Rend. **50** (1971) 625-629.
46. Area contractions in the plane, Rend. Sem. Mat. Univ. Padova **46** (1971) 49-52.
47. Convexité par rapport à une famille continue de courbes II, Atti Accad. Naz. Lincei Rend. **51** (1971) 127-132.
48. On  $k$ -path hamiltonian graphs and line-graphs, Rend. Sem. Mat. Univ. Padova **46** (1971) 385-389.
49. Trois caractérisations des ensembles convexes, Ist. Veneto Sci. Lett. Atti Cl. Sci. Mat. Natur. **130** (1971/72) 377-384.
50. A two-connected planar graph without concurrent longest paths, J. Combin. Theory B **13** (1972) 116-121.
51. Fix point theorems in metric spaces, Arch. Math. **23** (1972) 292-298.
52. On  $k$ -path hamiltonian line-graphs, Rend. Ist. Mat. Univ. Trieste **4** (1972) 123-129.
53. A theorem on fixed points, Atti Accad. Naz. Lincei Rend. **52** (1972) 832-834.
54. Generalizations of Banach's fixed point theorem, Atti Accad. Naz. Lincei Rend. **53** (1972) 329-333.
55. Sur les familles continues de courbes V, Atti Accad. Naz. Lincei Rend. **53** (1972) 505-507.

56. On  $k$ -path hamiltonian graphs, *Boll. Unione Mat. Ital.* **6** (1972) 61-66.
57. Some fixed point theorems in metric spaces, *Atti Accad. Sci. Ist. Bologna* **9** (1972) 86-93.
58. Two characterizations of the reducible convex bodies, *Abh. Math. Sem. Univ. Hamburg* **39** (1973) 69-75.
59. Propriétés géométriques des ensembles simplicialement convexes, *Atti Accad. Sci. Ist. Bologna* **10** (1973) 73-77.
60. A characterization of hamiltonian graphs, *Atti Accad. Sci. Ist. Bologna* **11** (1974) 39-40.
61. On spanning and expanding stars, *Atti Accad. Sci. Ist. Bologna* **1** (1974) 41-47.
62. Les Partages d'un Polygone Convexe en 4 Polygones Semblables au Premier (with G. Valette), *J. Combin. Theory B* **16** (1974) 1-16.
63. Fixed points and contraction theorems in metric spaces, *Aequat. Math.* **11** (1974) 138-142.
64. Metric spaces consisting of classes of convex bodies, *Rend. Ist. Mat. Univ. Trieste* **7** (1975) 128-136.
65. L'histoire et l'état présent des bornes connues pour  $P_k^j$ ,  $C_k^j$ ,  $\bar{P}_k^j$  et  $\bar{C}_k^j$ , *Cahiers du CERO* **17** (1975) 427-439.
66. Graphen, in welchen je zwei Eckpunkte von einem längsten Weg vermieden werden, *Ann. Univ. Ferrara* **21** (1975) 17-24.
67. On longest paths and circuits in graphs, *Math. Scand.* **38** (1976) 211-239.
68. Quelques questions sur les familles continues de courbes, in "Convex Geometry", Vrije Universiteit Brussel (1977) 31-35.
69. Generalized contractions and fixed points in metric spaces, *Rend. Sem. Mat. Univ. Politecn. Torino* **36** (1978) 191-204.
70. Sulle famiglie continue di curve VII, *Rend. Sem. Mat. Univ. Politecn. Torino* **36** (1978) 183-190.
71. Spreads, *Abh. Math. Sem. Univ. Hamburg* **50** (1980) 238-253.
72. Rectangular convexity (with R. Blind and G. Valette), *Geom. Dedicata* **9** (1980) 317-327.
73. Nonhamiltonian cubic graphs with isomorphic faces embedded in planar manifolds, in "Zweites Kolloquium über Diskrete Geometrie", Universität Salzburg (1980) 236-244.

74. The curvature of most convex surfaces vanishes almost everywhere, *Math. Z.* **174** (1980) 135-139.
75. Nonexistence of curvature in most points of most convex surfaces, *Math. Ann.* **252** (1980) 217-219.
76. Inscribed and circumscribed circles to convex curves, *Proc. Amer. Math. Soc.* **80** (1980) 455-457.
77. Three small cubic graphs with interesting hamiltonian properties, *J. Graph Theory* **4** (1980) 287-292.
78. Most monotone functions are singular, *Amer. Math. Monthly* **88** (1981) 47-49.
79. On continuous families of curves VI, *Geom. Dedicata* **10** (1981) 205-217.
80. Intersections of tangent convex curves, *J. Austral. Math. Soc. A* **31** (1981) 456-458.
81. Bihomogeneously traceable oriented graphs (with S. Hahn), *Rend. Sem. Mat. Univ. Politecn. Torino* **39** (1981) 137-145.
82. Many endpoints and few interior points of geodesics, *Invent. Math.* **69** (1982) 253-257.
83. Shortness exponents for polytopes which are  $k$ -gonal modulo  $n$  (with M. Schmidt), *J. Combin. Theory B* **33** (1982) 101-120.
84. Most convex mirrors are magic, *Topology* **21** (1982) 65-69.
85. Intersecting diameters in convex bodies, *Ann. Discrete Math.* **20** (1984) 311-316.
86. Convergence to fixed points in normed linear spaces, *Math. Japon.* **29** (1984) 63-67.
87. Typical monotone continuous functions, *Arch. Math.* **42** (1984) 151-156.
88. Points on infinitely many normals to convex surfaces, *J. Reine Angew. Math.* **350** (1984) 183-187.
89. Continuous families of smooth curves and Grünbaum's conjecture (with A. Zucco), *Can. Math. Bull.* **27** (1984) 345-350.
90. Ellipsoïdes et hyperboloïdes généralisés, *Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Nat.* **118** (1984) 314-324.
91. Interiors of uniform size in Steinitz's theorem (with J. Reay), in "Drittes Kolloquium über Diskrete Geometrie", Universität Salzburg (1985) 319-328.

92. Using Baire categories in Geometry, *Rend. Sem. Mat. Univ. Politecn. Torino* **43** (1985) 67-88.
93. Convex curves in gear, *Acta Math. Hung.* **46** (1985) 297-300.
94. Sur les graphes traçables les moins hamiltoniens (with A. Zucco), *Math. Japon.* **31** (1986) 493-502.
95. Nearly all convex bodies are smooth and strictly convex, *Monatsh. Math.* **103** (1987) 57-62.
96. Typical convex curves on convex surfaces, *Monatsh. Math.* **103** (1987) 241-247.
97. Typical convex sets of convex sets (with T. Schwarz), *J. Austral. Math. Soc.* **43** (1987) 287-290.
98. A characterization theorem for certain unions of two starshaped sets in  $\mathbb{R}^2$  (with M. Breen), *Geom. Dedicata* **6** (1987) 59-103.
99. How many sets are porous?, *Proc. Amer. Math. Soc.* **100** (1987) 383-387.
100. Typical starshaped sets, *Aequat. Math.* **36** (1988) 188-200.
101. Curvature properties of typical convex surfaces, *Pacific J. Math.* **131** (1988) 191-207.
102. An infinitesimal version of the Besicovitch-Danzer characterization of the circle, *Geom. Dedicata* **27** (1988) 209-212.
103. Too long shadow boundaries, *Proc. Amer. Math. Soc.* **103** (1988) 587-590.
104. Ghosts are scarce (with A. Volčič), *J. London Math. Soc.* **40** (1989) 171-178.
105. Description of most starshaped surfaces, *Math. Proc. Cambridge Phil. Soc.* **106** (1989) 245-251.
106. Porosity in Convexity, *Real Analysis Exch.* **15** (1989/90) 424-436.
107. Nondifferentiability properties of the nearest point mapping, *J. Analyse Math.* **54** (1990) 90-98.
108. Diameters in typical convex bodies (with I. Bárány), *Canad. J. Math.* **42** (1990) 50-61.
109. Generic properties of compact starshaped sets (with P. Gruber), *Proc. Amer. Math. Soc.* **108** (1990) 207-214.
110. The nearest point mapping is single valued nearly everywhere, *Archiv Math.* **54** (1990) 563-566.
111. Baire categories in Convexity, *Atti Sem. Mat. Fis. Univ. Modena* **39** (1991) 139-164.

112. On two conjectures of Franz Hering about convex surfaces, *Discrete Comput. Geom.* **6** (1991) 171-180.
113. Every arrangement extends to a spread (with J. Goodman, R. Pollack and R. Wenger), in "Proc. Third Annual Canad. Conf. on Comput. Geom." (1991) 191-194.
114. Conjugate points on convex surfaces, *Mathematika* **38** (1991) 312-317.
115. Hamiltonian properties of grid graphs (with Ch. Zamfirescu), *SIAM J. Discrete Math.* **5** (1992) 564-570.
116. The level set structure of nearly all real continuous functions (with P. M. Gandini), *Rend. Circ. Mat. Palermo, Suppl.* **39** (1992) 407-414.
117. Long geodesics on convex surfaces, *Math. Ann.* **293** (1992) 109-114.
118. There is a universal topological plane (with J. Goodman, R. Pollack and R. Wenger), in "Proc. Eighth Annual ACM Symposium on Comput. Geometry, Berlin, June 1992", 171-176.
119. Segments et géodésiques sur les surfaces convexes typiques, in "Travaux des Journées de Géométrie Convexe et Optimisation, Valencienne - Liège, 1992".
120. Invariance of convex sets under linear transformations (with G. Sierksma and V. Soltan), *Lin. and Multilin. Algebra* **35** (1993) 37-47.
121. A generic view on the theorems of Brouwer and Schauder, *Math. Z.* **213** (1993) 387-392.
122. On the curvatures of convex curves of constant width, *Atti Sem. Mat. Fis. Univ. Modena* **42** (1994) 253-256.
123. Every arrangement extends to a spread (with J. Goodman, R. Pollack and R. Wenger), *Combinatorica* **14** (1994) 301-306.
124. Arrangements and topological planes (with J. Goodman, R. Pollack and R. Wenger), *Amer. Math. Monthly* **101** (1994) 866-878.
125. A characterization of 3-dimensional convex sets with an infinite X-ray number (with K. Bezdek), in "Coll. Math. Soc. J. Bolyai: 63. Intuitive Geometry, Szeged, 1991" (1994) 33-38.
126. For most convex disks thinnest covering is not lattice-like (with G. Fejes Tóth), in "Coll. Math. Soc. J. Bolyai: 63. Intuitive Geometry, Szeged, 1991" (1994) 105-108.
127. On some questions about convex surfaces, *Math. Nachrichten* **172** (1995) 313-324.
128. How to hold a convex body?, *Geom. Dedicata* **54** (1995) 313-316.

129. Most homeomorphisms of the circle are semiperiodic (with G. Crăciun, P. Horja and M. Prunescu), *Archiv Math.* **64** (1995) 452-458.
130. How do convex bodies sit?, *Mathematika* **42** (1995) 178-181.
131. A characterization of infinite, bipartite Toeplitz graphs (with R. Euler and H. Le Verge), in: "Combinatorics and Graph Theory '95" **1** (1995) 119-130.
132. From melons to bananas (rom.), *Gaz. Mat.* **100** (1995) 487-491.
133. Géodésiques et lieux de coupure sur les surfaces convexes typiques, *Analele St. Univ. Ovidius Constanța* **3** (1995) 167-173.
134. Points joined by three shortest paths on convex surfaces, *Proc. Amer. Math. Soc.* **123** (1995) 3513-3518.
135. Conjugate points and closed geodesic arcs on convex surfaces, *Geom. Dedicata* **62** (1996) 99-105.
136. Hamiltonian properties of Toeplitz graphs (with R. van Dal, G. Tijssen, Zs. Tuza, J. van der Veen and Ch. Zamfirescu), *Discrete Math.* **159** (1996) 69-81.
137. Intersections of longest cycles in grid graphs (with B. Menke and Ch. Zamfirescu), *J. Graph Theory* **25** (1997) 37-52.
138. Closed geodesic arcs in Aleksandrov spaces, *Rend. Circ. Mat. Palermo Suppl.* **50** (1997) 425-430.
139. The dimension print of most convex surfaces (with G. Crăciun), *Monatsh. Math.* **123** (1997) 203-207.
140. Convex bodies instead of needles in Buffon's experiment (with A. Aleman and M. Stoka), *Geom. Dedicata* **67** (1997) 301-308.
141. Farthest points on convex surfaces, *Math. Z.* **226** (1997) 623-630.
142. The typical number is a lexicon (with C. Calude), *New Zealand J. Math.* **27** (1998) 7-13.
143. Extreme points of the distance function on convex surfaces, *Trans. Amer. Math. Soc.* **350** (1998) 1395-1406.
144. Cardinality of the metric projection on typical compact sets in Hilbert spaces (with F. De Blasi), *Math. Proc. Cambridge Phil. Soc.* **126** (1999) 37-44.
145. Most numbers obey no probability laws (with C. Calude), *Publ. Math. Debrecen* **54** Suppl. (1999) 619-623.
146. Tiling the pentagon (with R. Ding and D. Schattschneider), *Discrete Math.* **221** (2000) 113-124.

147. Hamiltonian Cycles in  $T$ -Graphs (with J. Reay), Discrete Comput. Geom. **24** (2000) 497-502.
148. On a theorem of Deutsch and Singer, Set-Valued Analysis 8, **3** (2000) 295-297.
149. Dense ambiguous loci and residual cut loci, Rend. Circ. Mat. Palermo Suppl. **65** (2000) 203-208.
150. Acute triangulations (with Th. Hangan and J. Itoh), Bull. Math. Soc. Sc. Math. Roumanie **43**, 3-4 (2000) 279-286.
151. Intersecting longest paths or cycles: a short survey, Analele Univ. Craiova, Ser. Mat.-Inf., **28** (2001) 1-9.
152. On the length of the cut locus on surfaces (with J. Itoh), Rend. Circ. Mat. Palermo Suppl. **70** (2002) 53-58.
153. Acute triangulations of triangles on the sphere (with J. Itoh), Rend. Circ. Mat. Palermo Suppl. **70** (2002) 59-64.
154. Acute triangulations: a short survey, Proc. 6th Annual Conference Romanian Soc. Math. Sciences I (2002) 10-18.
155. Total curvature and spiralling shortest paths (with I. Bárány and K. Kuperberg), Discrete Comp. Geom. **30** (2003) 167-176.
156. Qualitative infinite version of Erdős' problem about empty polygons, in: Goodman-Pollack Festschrift (2003) 849-853.
157. Acute triangulations of the regular icosahedral surface (with J. Itoh), Discrete Comput. Geom. **31** (2004) 197-206.
158. On the cut locus in Alexandrov spaces and applications to convex surfaces, Pacific J. Math. **217** (2004) 375-386.
159. Extending Stechkin's theorem and beyond, Abstract Appl. Analysis **2004** (2004) 255-258.
160. On the length of the cut locus for finitely many points (with J. Itoh), Adv. Geom., **5** (2005) 97-106.
161. The strange aspect of most compacta, J. Math. Soc. Japan **57**, 3 (2005) 701-708.
162. On the perimeter of a triangle in a Minkowski plane (with H. Maebara), Amer. Math. Monthly **112** (2005) 521-522.
163. Simplices passing through a hole (with J. Itoh), J. Geom. **83** (2005) 65-70.
164. Symmetry and the farthest point mapping on convex surfaces (with C. Vîlcu), Adv. Geom. **6** (2006) 379-387.

165. On the number of shortest paths between points on manifolds, *Rend. Circ. Mat. Palermo Suppl.* **77** (2006) 643-647.
166. Tetrahedra passing through a circular or square hole (with J. Itoh and Y. Tanoue), *Rend. Circ. Mat. Palermo Suppl.* **77** (2006) 349-354.
167. On the critical points of a Riemannian surface, *Adv. Geom.* **6** (2006) 493-500.
168. Acute triangulations of the regular dodecahedral surface (with J. Itoh), *Eur. J. Comb.* **28** (2007) 1072-1086.
169. Multiple farthest points on Alexandrov surfaces (with C. Vilcu), *Adv. Geom.* **7**(2007) 83-100.
170. Acute triangulations of flat Möbius strips (with L. Yuan), *Discrete Comput. Geom.* **37** (2007) 671-676.
171. A planar hypohamiltonian graph on 48 vertices (with C. T. Zamfirescu), *J. Graph Theory* **55**, 4 (2007) 338-342.
172. Hamiltonicity of topological grid graphs (with Ch. Zamfirescu), *J. Universal Comp. Sci.* **13** (2007) 1791-1800.
173. Antipodal trees and mutually critical points on surfaces, *Adv. Geom.* **7** (2007) 385-390.
174. Viewing and realizing diameters, *J. Geom.* **88**, 1-2 (2008) 194-199.
175. Minkowski's theorem for arbitrary convex sets, *Eur. J. Comb.* **29** (2008) 1956-1958.
176. Polytopes passing through circles, *Periodica Math. Hung.* **57** (2008) 227-230.
177. Some remarks on simple closed geodesics of surfaces with ends (with J. Itoh and F. Ohtsuka), *Bull. Math. Soc. Sc. Math. Roumanie* **52**, 3 (2009) 311-319.
178. Hamiltonian properties of generalized Halin graphs (with S. Malik and A. M. Qureshi), *Can. Math. Bull.* **52** (2009) 416-423.
179. Hamiltonian Connectedness in Directed Toeplitz Graphs (with S. Malik), *Bull. Math. Soc. Sci. Math. Roumanie* **53**, 2 (2010) 145-156.
180. Non-expanding mappings in graphs, *Adv. Appl. Math. Sci.* **6** (2010) 23-32.